

Notice of Allowability

Application No.

10/635,071

Examiner

Khanh Dinh

Applicant(s)

KOWALSKI ET AL.

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/30/2006.
2. ☒ The allowed claim(s) is/are 4-10.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


KHANH DINH
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100

ALLOWANCE

1. This is in response to the Amendment filed on 10/30/2006.

Terminal Disclaimer

2. The terminal disclaimer filed on 10/30/2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of the US Patent Number 6,631,410 B1 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Allowable Subject Matter

3. Claims 4-10 are allowed.
4. The following is an examiner's statement of reasons for allowance:

The above mention claims are allowable over the prior art of record does not appear to each or render obvious the claimed limitations in combination with the specific added limitations as recited in independent claims and subsequent dependent claims.

*For independent claim 4, none of the cited prior art discloses or teaches a method of synchronizing a multimedia content stream for output to a plurality of wired and wireless output devices in a network having plural realms, wherein each realm includes a connection control processor (CTL) comprising a combination of: determining a buffer delay as $TD = N * TED * R_p$, where TD is the delay size, N is the byte size of a*

Art Unit: 2151

packet, TED is an end-to-end delay, and R_p is the transmission rate of packets per second, transmitting the buffer delay to all CTLs in all realms of the network and transmitting the multimedia content stream to all realms in the network.

For independent claim 8, none of the cited prior art discloses or teaches A method for synchronizing a multimedia content stream signal, emanating from at least one multimedia source, for play through a plurality of output devices, comprising a combination of: synchronizer, including a wired realm buffer for storing the multimedia content stream signal; an output device connected to the wired realm delay synchronizer; and a wired realm connection control processor (CTL) connected between the first wired realm transceiver and the wired realm delay synchronizer for using delay information measured, signaled and updated from the output realms to synchronize playback at each of the output devices; the invention further includes the steps of: providing for each wireless realms: a wireless realm transceiver; a wireless realm delay synchronizer including a wireless realm buffer for storing the multimedia content stream signal an output device connected to the wireless realm delay synchronizer and a wireless realm connection control processor (CTL) connected between the wireless realm transceiver and the wireless realm delay synchronizer, disseminating medium access control (MAC) layer information about delay an jitter between the wireless realm transceiver and the wireless realm delay synchronizer; determining a wireless realm buffer delay for streaming the multimedia content stream signal from the wireless realm buffer to an output device; transmitting the


wireless realm buffer delay to the wired realm CTL and transmitting the wired realm buffer delay to the wireless realm CTL.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Dinh whose telephone number is (571) 272-3936. The examiner can normally be reached on Monday through Friday from 8:00 A.m. to 5:00 P.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung, can be reached on (571) 272-3939. The fax phone number for this group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


KHANH DINH
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100